# A Short Term Therapy Approach to Processing Trauma: Art Therapy and Bilateral Stimulation

Tally Tripp, Washington, DC

### **Abstract**

This article describes a dynamic, short-term art therapy approach that has been developed for the treatment of trauma related disorders. Using a modified Eye Movement Desensitization and Reprocessing (EMDR) protocol with alternating tactile and auditory bilateral stimulation, associations are rapidly brought to conscious awareness and expressed in a series of drawings. As new information is accessed, affective material is metabolized and integrated, leading to transformation of traumatic memory and an adaptive resolution of the trauma. Readers are cautioned that clinicians using this approach should be experienced in working with trauma.

### Introduction

There may be a variety of reasons as to why art therapy is well suited for the treatment of trauma related disorders. Since ancient times, imagery has been recognized as vital to healing. Image, simply put, is the language of the unconscious. Images can yield information; create understanding; evoke expression; and transform thinking, feeling, and acting (Horowitz, 1983). Art can greatly enhance the experience of insight; it is concrete and visual, and it can convey multiple unconscious feelings and ideas (Rubin, 2001).

The visual arts and art therapy can have a positive effect on various areas in a person's life. When a client is involved with art media, numerous cognitive and emotional processes are activated simultaneously. Lusebrink (2004) posited that art therapy, which utilizes both hemispheres of the brain, is uniquely suited to make use of neural pathways to

Editor's note: Tally Tripp, MA, ATR-BC, MSW, LCISW, is Director of Graduate Studies at The George Washington University Art Therapy Program. She is a Certified Level II EMDR clinician. This paper was presented in a different form at the 37th annual conference of the American Art Therapy Association in New Orleans, LA. Correspondence concerning this article can be sent to ttripp@gwu.edu.

Editor's note: Although there has been some controversy in EMDR research, the Cochrane Review, an independent body that analyzes the outcomes of treatment studies, recently concluded that EMDR is one of the treatments determined to be efficacious in the treatment of PTSD. For more information on this and other treatments, readers are referred to the Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD003388. DOI: 10.1002/14651858.CD003388.pub3. Available at http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD00338 8/frame.html.

process memory, visual, and kinesthetic information. Because art is a psychomotor activity, it has been suggested that it has the capacity to tap sensory memories of trauma (Steele, 2003). According to Steele, making art engages the client in an "active, directed [and] controlled externalization of traumatic experiences" (p.149). It appears likely that the kinesthetic activity in art making may facilitate a release of tension and serve to enhance a relaxation response while aiding in the toleration of stressors (Chapman, Morabito, Ladakakos, Schreier, & Knudson, 2001). The artwork provides a symbolic representation of the trauma and serves to contain feelings about the event. Malchiodi (2003) suggested that through art, a traumatized individual can think and feel at the same time. She further stated that art therapy can provide alternative ways to respond to events, to encourage experimentation, and to facilitate access to positive emotional and behavioral change. Art therapy in trauma treatment has been described as providing a means for resolving memory fragmentation and integrating traumatic material (Collie, Backos, Malchiodi, & Spiegel, 2006). Because it can be a pleasurable experience, making art can also address emotional numbing and reactivate positive affect (Collie et

This article examines a dynamic, short-term art therapy approach to treating trauma. This work has been informed by current research in neurobiology, attachment theory, sensorimotor therapy, and the technique of Eye Movement Desensitization and Reprocessing (EMDR). Inherent in the blended model presented here is the belief that giving access to inner, unconscious thoughts and feelings through imagery can illuminate information that sends a healing message to the brain. Shapiro (2001) stated that it is the "natural tendency of the brain's information-processing system to move toward a state of mental health" (p. 32). Omaha (2004) added that healing occurs when the client's various affective states are attenuated by a therapist who can guide the client toward resolution and transformation.

### Trauma and Issues of Attachment

When a patient enters into therapy with a psychotherapist, he or she is engaged in the process of co-creating a meaningful connection. Sometimes this is verbal but often it is the deeper, non-verbal connection that facilitates real healing (Siegel, 2003). This complex interpersonal task is deeply rooted in neurobiology. The brain is driven both by genetic information and by the impact of experience (Siegel, 2003). Therapy seeks to "revise the neural code

that directs [the] emotional life" (Lewis, Amini, & Lannon, 2000, p. 176). In other words, the task of therapy is to help clients make changes in their emotional brains so that they can learn to process information adaptively and to engage in the practice of making healthy life choices.

### Trauma and Neurobiology

According to Shapiro (2002), trauma is "any event that has a lasting negative effect on the self or psyche" (p. 14). While the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association, 2000) describes trauma in the diagnosis of posttraumatic stress disorder (PTSD) based on isolated, life threatening incidents, Shapiro (2002) contends that "small t" traumas, including the ubiquitous, anxiety provoking scenes from childhood such as humiliation or being rejected, can be significant and can have lasting negative consequences. Shapiro (2002) states,

Dysfunctional pivotal...memories contain the perceptions that were encoded at the time of the event—images, thoughts and sounds, emotions, physical sensations, and the metaperceptions or self-beliefs...these pivotal early experiences may be encoded with fundamentally unaltered childhood perceptions, regardless of the current age of the client (p. 10).

Because the present is perceived through the lens of the past, unprocessed traumatic memories can stimulate arousal corresponding to fears of abandonment, fear of failure, loss of love, and anxiety about survival (Shapiro, 2002).

Chronic maltreatment or repeated trauma can have a pervasive effect on the developing mind and brain. When a young child experiences an ongoing failure of attunement with a caretaker or when distress is overwhelming, a breakdown in the capacity to regulate internal states ensues. Trauma-induced neurobiological disruptions affect the developing brain and shape the person's capacity to integrate sensory, cognitive, and emotional information. According to Schore (2003), a person who has been neglected, deprived, or abused will actually experience neuronal cell death in the affective centers of the limbic system of the brain. The result of these prolonged adverse events can be evident in a wide variety of symptoms including impaired self-regulation, somatization, aggression against the self and others, character pathology, and dissociation (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Other results of this neurobiological dysregulation may include difficulty maintaining homeostasis, disruption in the brain memory systems, and disturbance in areas of executive functioning and the neurotransmitter system (van der Kolk, 2003). Processing new experiences, regulating emotion, and forming positive relationships can be severely compromised (Fosha, 2003).

Recent neuro-imaging studies have made it possible to observe responses of the brain to stress. In an experiment conducted by Rausch et al. (1996), brain scans were administered to traumatized patients who were exposed to scripts of their disturbing events. The resultant images

show that the left frontal area of the cortex, in particular the Broca's area (the center of speech), appears to shut down when trauma is recalled. At the same time, the right hemisphere, particularly the amygdala or area associated with emotional states, lights up or gets aroused. What these neuro-imaging studies demonstrate is that the executive functioning of the brain becomes impaired when the traumatic memory is recalled. This phenomenon seems to account for the "speechless terror" that traumatized individuals face when attempting to verbalize what they are experiencing (van der Kolk, 1994, 2002a).

### Trauma and Memory

Brain researchers have theorized that memory is stored in several ways: through explicit memory, which is episodic, factual, and autobiographical, requiring focal attention; and through implicit memory, a predominately emotional, sensory, and unconscious memory often described as related to the body (Rothschild, 2000; Scaer, 2001, 2005; Siegel, 2003). It appears that trauma gets encoded as sensation in the implicit memory and is often expressed in disturbing flashbacks that are not connected with explicit information (Rothschild, 2000; Shapiro & Forrest, 2004; van der Kolk, 2003). For an individual with unresolved traumatic stress, the implicit memory turns inward, evoking inappropriate somatic and autonomic responses that pertain not to the present moment but to past trauma (Scaer, 2005). Once sensory triggers mobilize the habitual protective brain response, the resulting sympathetic and parasympathetic activation interferes with effective executive functioning (van der Kolk, 2006).

### Processing Trauma

Ogden and Minton (2000) proposed two mechanisms by which the mind-body-brain processes information: topdown processing, which is initiated by the cortex and involves cognition, planning, and thought; and bottom-up processing, which is initiated at the more fundamental sensorimotor and emotional level, and is connected with overall body processing. For victims of trauma, it has been suggested that the "felt sense" of the body is the optimal point of entry for healing (Levine, 1997; Ogden & Minton, 2000). When the client is directed to be aware of the sensorimotor experience while inhibiting the specific content and emotions of the experience, traumatic memories can gradually be assimilated (van der Kolk, 2002b). Therapists who are attuned to sensorimotor processes can help their clients track the way trauma is held in the body, noting states of hyperarousal, breath holding, constriction, collapsed posture, and trembling (Ogden, Minton, & Pain, 2006). Levine (2005) suggested that when one is able to access body memories through a felt sense, it is possible to discharge and transform the instinctive survival energy and restore normal functioning. According to van der Kolk (2002a):

The task of therapy is to both create a capacity to be mindful of the current experience and to create symbolic representations of past traumatic experiences with the goal of uncoupling physical sensations from trauma-based emotional responses, thereby taming the emotional terror (p. 19).

## Art Therapy, Bilateral Stimulation, and Trauma Treatment

A bilateral art therapy protocol developed by McNamee (2003, 2004, 2006) and based on the work of Cartwright (1999) purposefully engages both hemispheres of the brain and multiple sensory systems to "perturb maladaptive neural organization" (2006, p. 8). McNamee asked the client to create drawings using dominant and, subsequently, non-dominant hands in response to clientidentified conflicting beliefs, cognitions, and feelings. Talwar (2007) used bilateral stimulation in her art therapy trauma protocol. She asked her clients to physically get up and paint while concentrating on a traumatic memory, alternating between dominant and non-dominant hands. Talwar posited that creating an image in this way facilitates sensory awareness and promotes affective and emotional regulation. Chapman et al. (2001) suggested that the process of creating drawings (and especially scribbles) activates the limbic system, thereby facilitating the expression of emotion. The Chapman et al. protocol paired the kinesthetic activity of a scribble experience with a structured verbal interview, thus engaging both sides of the brain. They believed this process of utilizing both right and left brain neural pathways may activate the right hemisphere storage and integration of traumatic events, resulting in a decrease in PTSD symptoms.

### EMDR and Dual Attention Stimulation

Underlying the technique of bilateral stimulation is the work of Francine Shapiro (2001, 2002) who developed the Eye Movement Desensitization and Reprocessing (EMDR) treatment with dual attention stimulation. EMDR is an integrative approach that can treat a wide range of complaints, with therapeutic elements that have been synthesized from different theoretical orientations. Dual attention stimulation in EMDR originally consisted of the therapist facilitating the client's bilateral eye movements across a focal plane and was later expanded to include bilateral taps (tactile) and sounds (auditory). Shapiro (2001) posited that old memory networks are activated while attention is focused on the present with external visual, auditory, or tactile cues. EMDR processing takes the client through the network of disturbing memories, incorporating sets of bilateral stimulation while attending to new information as it is accessed and gradually processed through the brain. With each new association, the client is guided to report shifts in sensation and perception until the disturbance is gone and an adaptive resolution has been successfully integrated. EMDR "focuses on the personal experience, it downplays what the therapist thinks of the event and, instead, deals directly with how the experience has affected the client" (Shapiro & Forrest, 2004, p. 14). The adaptive information processing model (AIP) is based

on the theory that "all memory is associated and that learning occurs through the creation of new associations" (Shapiro & Maxfield, 2003, p. 197).

### Method

This therapeutic approach for treating traumatic stress integrates dual attention focusing, heightened somatic awareness, art making, and narrative. The process facilitates access to previously defended affective material, bringing somatic and sensory-based images to conscious awareness at an accelerated pace. Multiple, consecutive images are created in conjunction with ongoing bilateral tactile and auditory stimulation. By making art and focusing on the body and physical sensations in the present, the client can be made to feel safe and relaxed while moving quickly and deeply through layers of unresolved material from the past. Distressing memories are transformed with new associations to adaptive and positive information. This approach has been successful with processing complex as well as single event trauma, and the resulting shifts in awareness and perception often have been rapid and dramatic.

This integrated EMDR and art therapy protocol directs the client to select a disturbing memory and to identify an image, a negative self-referencing belief, as well as the emotions and sensations that accompany that targeted memory. During art making, the client wears a set of headphones that produces quiet sounds, tones, and music alternating bilaterally between the left and right ears. At the same time, a small hand-held pulsating device is placed under each knee, producing a gentle vibration that also alternates bilaterally. These devices, commonly used in EMDR, seem to be rather pleasant accessories for my clients, who find them soothing and relaxing; importantly, they do not interfere with their ability to create art.

The client begins the session by drawing an image of the targeted traumatic event where the negative metaperception developed. This could be represented as an image of a time when the person felt any negative self-belief such as "I am unlovable," "I am helpless," or "I am to blame," for example. The goal in processing is to help the client recognize the irrational aspects of this belief and to express feelings in the present that may have been unsafe or unavailable at the time. After the initial "target" memory is drawn, sets of bilateral sounds and taps are initiated while the client attends to the image and reports any associations that come to mind. Sets of sequential bilateral stimulation can be of any duration and can accompany the art making experience. It is through the creation of consecutive drawings or paintings that new cognitions can be tracked and new avenues of awareness can emerge. The new belief "I am lovable" is an example of a positive shift in cognition.

The art work produced becomes a tangible series that can visually track the steps and progress made by the client. Because new information and associations to information become available to the client during processing, a spiral-bound drawing pad facilitates uninterrupted art making so that pages can be easily turned and new images readily created. Most clients can produce four to six images in a sin-

gle 90-minute session. The process is titrated with short as well as longer sets of bilateral stimulation, art making, and brief, focused interventions by the therapist to clarify issues and to help the client access and integrate more adaptive associations. These associations give way to new perceptions and understandings of the early targeted memory from an adult perspective. Once the session is complete, multiple finished images provide a useful tool for further verbal processing and resolution.

### Case of Betty

The following case will demonstrate this short-term art therapy approach to processing trauma. Betty (pseudonym) was an attractive, middle-aged woman who had been generally successful and happy with her career as a family therapist. She came to therapy on the recommendation of a colleague, based on a certain "stuckness" she would get when working with particular types of marital therapy cases. This seemed to parallel a recent conflict she had experienced in her peer supervision group. When discussing a "problem" case, she felt harshly challenged by a senior male group member, which brought some unresolved feelings to the surface. Ultimately, Betty became so uncomfortable with the issues raised by this man that she decided to take a leave of absence from the group. Betty's goal in art therapy was to understand more about the conflict that had been stirred up in the supervision group as well as to gain insight into the difficulties she was experiencing in her practice.

Betty was raised in the rural south in the 1950s in a conservative, religious family where she was the older of two children. There was great discord between her parents; her mother was only 18 when Betty was born and her father was an alcoholic with chronic depression. Of particular significance in her history is the fact that she was sexually molested by a neighbor at the age of 8 but never had mentioned it to anyone at the time of the assault. She spent 8 years, between the ages 17 and 24, living in a religious convent. She was able to repress the memory of the childhood abuse until it came back to her during a year spent in silent prayer. She confided to a priest, who advised her: "Sister, forget about it."

In our initial session, Betty produced several "scribble drawings" as a part of a personality assessment procedure (Ulman & Levy, 1968). In her first scribble, Betty immediately perceived within its lines the image of a mother and child gazing at each other, an important symbol of the earliest relationship. Betty experienced the image as "real" and became tearful when describing her associations to it. The picture related to her childhood wishes for tenderness and connection. Betty's mother had not been a nurturing figure, had not been able to hold her with a loving gaze, and this image brought up tremendous feelings of sadness and longing. She titled the picture "Mother's love" (Figure 1).

In the second scribble of the series, Betty said she couldn't find much imagery in the random lines. She finally developed an image of a butterfly in the extreme corner of the page, describing it as "carefree, with no hurt, no

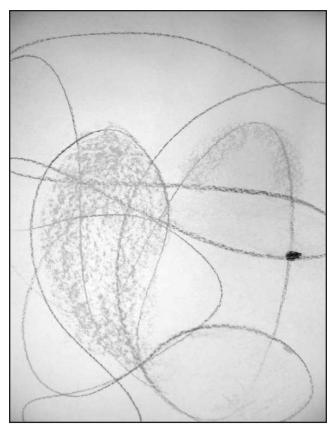


Figure 1 "Mother's love"

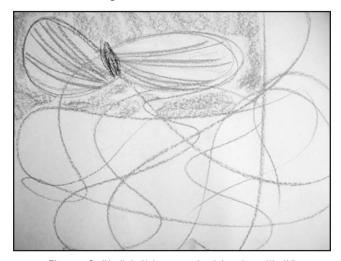


Figure 2 "I didn't know what to do with it"

judgment, and no history" (Figure 2). It is interesting that the butterfly alone is defined, whereas the rest of the picture is left undeveloped. When I asked Betty about this, she said, "I didn't know what to do with it."

These pictures from the initial session provided a useful outline of the goals for the brief art therapy that was to follow. In depicting her longing for connection and "mother's love," Betty portrayed her feelings of loss and the implicit message that she felt unlovable. When parents are not available, it is common for a child to take responsibility for being defective or unlovable, thus relieving the parents' responsibility. Betty's decision to remove herself from

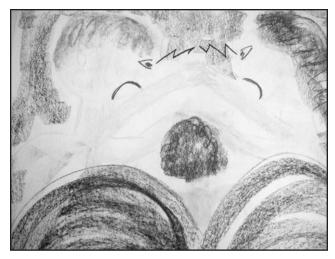


Figure 3 "In the car"

the consultation group rather than confronting the member who upset her suggests a persistent pattern of assuming an identity of being defective. In the second picture, her sense of not knowing what to do and flying away may be equated with continued feelings of helplessness, both in her interactions with her peer group and with difficult clients. In these first pictures, Betty shared negative self-beliefs formed in early childhood: that she felt unlovable, defective, and powerless. In the following session when we discussed these beliefs, she related a disturbing childhood memory.

I asked Betty to draw an image representing the traumatic memory (target) while thinking about the negative self-statement "I am powerless." Bilateral auditory and tactile stimulation was initiated by the headphones on her ears and the pulsers under each knee. Betty enjoyed the auditory and tactile stimulation, and it may have been useful in keeping her relaxed and focused on the art while moving through the difficult material. I directed the process by interrupting Betty each time she seemed to finish an image, stopping the stimulation and briefly attending to verbal associations to the art, then restarting the stimulation and directing her to return to making art.

Betty's "target" drawing was of a memory from when she was 7 years old. She remembered being in the back seat of a car, watching her parents yelling and hitting each other. In her drawing, her parents are connected negatively in a locked "gaze" with black, jagged lines (Figure 3). Betty described the picture as "grim" and said she felt paralyzed. I asked her to connect that feeling to where it might be stored in her body. Continuing to look at her picture, she began to flush with initial feelings of helplessness that moved toward anger. Betty stated that her parents were "irresponsible" and that it was "unfair" of them to do this to a child. This marked the beginning of a shift of cognition; her adult self could recognize the irresponsibility of her parents.

Betty's next set of associations were to the words "irresponsible" and "unfair." I directed her to hear these words while allowing new images to come forward in a second drawing. Bilateral auditory and tactile stimulation was

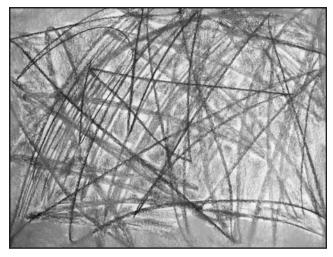


Figure 4 "Scribble"

resumed and Betty picked up the pastels. She created a red and black scribble, covering the page with heavy pressure, then filled it in with blue and green, and finally added grey around the outside (Figure 4).

Betty associated feelings with each of the colors: black was her parents "ugliness" and her feelings of depression, red was the "faceless priest who did nothing" along with her feeling of anger at his being "inept," blue and green were the silence of her prayers and her pattern of "avoiding feelings," and grey was "forgetting the abuse." She was quite absorbed in creating this piece, which seemed to bring forward as well as contain layers of previously unacknowledged affect.

When she finished drawing, I stopped the bilateral stimulation and asked for verbal associations to the finished image. Betty described the conflict she experienced as a child, feeling afraid and helpless as well as guilty and responsible. In her words: "It starts out all black and red—my horror and their anger. Then coldness sets in—that's the blue green—and then the paralysis that takes over. In the end the grey encases everything—everything is frozen in time." The words "frozen in time" relate well to the way trauma can be described as stored in the brain, frozen and unchanged over time. It also suggests the helpless and paralyzed feelings of the child ego state. I asked Betty to focus on the "frozen" grey border of the picture while resuming the bilateral stimulation.

In the next drawing, Betty quickly moved to depict the face of a clock filled in with a strong red color (Figure 5). It appeared that Betty had gone from a frozen grey to an activated red state. By staying with "red" and allowing the images and sensations to be present in her body, Betty was now able to draw her new cognitive insight. She stated, with increased affect, that the clock had to be red and not grey. She spoke loudly: "It is what it is—the anger is appropriate and righteous!" This represents an important shift. It became apparent that Betty was now energized, in touch with her angry affect, feeling sensation in her body, and no longer frozen. Through the strong red color, applied energetically and with heavy pressure, Betty could

feel the presence of appropriate and righteous anger. The jagged lines from her parent's angry eyes were now integrated into the hands of her own clock. She was no longer feeling like a helpless child.

In continuing to process through the anger, however, Betty expressed a new fear that her rage was "unacceptable." Her association was that everyone else in her family was allowed to be angry, but she was not. She said her family's anger was "repulsive." I asked Betty to draw the repulsive, scary feeling. With little hesitation, she created a large but sketchy image of twin towers with fire and smoke coming out of the tops that evoked the image of the September 11, 2001 attacks on World Trade Center (Figure 6).

She described the "absolute destructiveness" of her parents' anger. She vehemently added "There are innocent people in there and they don't see the hurt they are causing!" At this point, Betty expressed a combination of rage and sadness. She had been terribly hurt as a child, and her parents' violent and neglectful behavior had had a devastating, lasting effect upon her. One can see that this final picture does not hold together very well. It is vague and quickly sketched, barely representative of the actual horror the twin towers represent. It suggests her fear of acknowledging her own rage too clearly and her continued belief that the destructive force of anger could yield annihilation. In her therapy it was important to help Betty see her own anger as separate from the anger of others.

In a single session so much was expressed. The images demonstrate Betty's mixed feelings related to the destructive force of her caregivers. Although she could now feel and acknowledge the intensity of her own anger, she also knew more about her fears and potential consequences. In wrapping up the session, the cognitive shift for Betty occurred in her new idea that although her parents' anger was devastating, her own angry feelings were not destructive; in fact, they were fundamental to her healthy functioning.

### Conclusion

For Betty, the implicit, stored memory of being a frightened, helpless child had become the underlying symptom of her present difficulty dealing with conflict. She had held on to a somatic memory of being small, scared, and helpless to effect change in her chaotic and abusive family environment. Betty had endured the trauma of familial hostility as well as the single, specific traumatic event of being molested. The associations to these events resonated in the present, where she was still frozen, as demonstrated by her difficulty dealing with conflict and expressing anger. Through brief, focused art therapy, Betty was able to gain a better sense of her underlying feelings of rage towards her abuser, her parents, the priest, and her church. She was also able to look back at a seminal incident, imagining herself as a little girl peering over the back seat of the car watching her parents fight. She could now see, from an adult perspective, how small and frightened she had been. This awareness facilitated the recognition that she was not responsible for her parents' discord, nor was she capable of stopping it. Although Betty may have

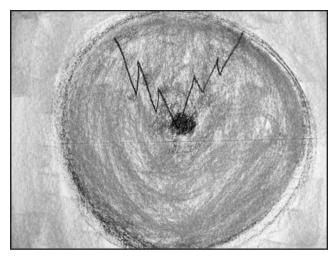


Figure 5 "Frozen in time"

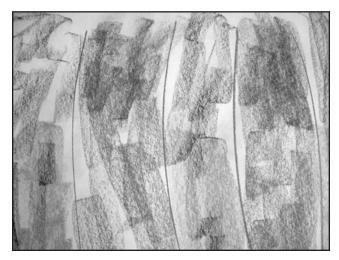


Figure 6 "Twin towers"

known this intellectually, she had been unable to rid herself of feelings of guilt and responsibility. Her response had been to develop defenses to avoid her negative feelings, and she realized that this was no longer serving her well.

The entire series of drawings reflects Betty's progression from the initial wishes for dyadic attunement, as projected into the scribble of a mother's gaze, to the feelings of rage coming out of a sense of being powerless and emotionally frozen. Betty became more active in the sessions and gained a new sense of her adult power and authority. She recognized the intensity and destructiveness of the adults in her life, and expressed her angry feelings.

The combination of a modified EMDR protocol with art expression and verbal processing successfully allowed Betty to make new connections and to alter long held negative cognitions. Betty was able to experience her rage as "justified" and "righteous." She could now assert a sense of her own power and control. She became clearer about the helpless parts of herself that were rooted in childhood and the stronger, capable self that had new options in the present. It was understandable, based on her picture of the twin tower image, that she had been fearful of the intensity of angry feelings. Through this therapy, Betty was able to rec-

ognize that her anger did not have to be the same as her parents' anger and that she could separate herself in the present from the intense feelings of her past. She could let go of being in a frozen place without anger; she could have her anger and not fall apart. On follow up with this client one year after art therapy treatment, she reported feeling very positive about the outcome of these sessions and noted that she had continued to reflect upon and process the work we had begun.

This treatment has modified the standard Eye Movement Desensitization and Reprocessing protocol for processing traumatic memory and integrated it as a powerful tool with art therapy. The strength of this intervention is the rapid and dramatic shift in awareness and cognition that can accompany a negatively held somatic memory, monitored through art imagery. This memory is metabolized and integrated within an intensive therapeutic process that incorporates bi-lateral stimulation and art making. The result is the adaptive resolution of trauma. Because this approach can activate strong affective and sensory responses and associations in the client, it should not be undertaken unless the therapist has training in EMDR and art therapy, as well as clinical experience with trauma-related disorders.

### References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., Rev.). Washington, DC: Author.
- Cartwright, L. (1999).  $SCtD^{TM}$  meditations: Neurological approaches to dream and art work. Santa Fe, NM: Lee Cartwright.
- Chapman, L., Morabito, D., Ladakakos, C., Schreier, H., & Knudson, M. (2001). The effectiveness of art therapy interventions in reducing post traumatic stress disorder (PTSD) symptoms in pediatric trauma patients. Art Therapy: Journal of the American Art Therapy Association, 19(2), 100-104.
- Collie, K., Backos, A., Malchiodi, C., & Spiegel, D. (2006). Art therapy for combat-related PTSD: Recommendations for research and practice. *Art Therapy: Journal of the American Art Therapy Association*, 23(4), 157-164.
- Fosha, D. (2003). Dyadic regulation and experiential work with emotions and relatedness in trauma and disorganized attachment. In M. Solomon & D. Siegel (Eds.), *Healing trauma: Attachment, mind, body, and brain* (pp. 221-282). New York: W. W. Norton.
- Horowitz, M. (1983). *Image formation and psychotherapy.* New York: Jason Aronson.
- Levine, P. (1997). Waking the tiger: Healing trauma. Berkeley, CA: North Atlantic.
- Levine, P. (2005). *Healing trauma: A pioneering program for restoring the wisdom of your body.* Boulder, CO: Sounds True.
- Lewis, T., Amini, F., & Lannon, R. (2000). A general theory of love. New York: Random House.

- Lusebrink, V. B. (2004). Art therapy and the brain: An attempt to understand the underlying processes of art expression in therapy. *Art Therapy: Journal of the American Art Therapy Association*, 21(3), 125-135.
- Malchiodi, C. (2003). *Handbook of art therapy.* New York: Guilford Press.
- McNamee, C. M. (2003). Bilateral art: Facilitating systemic integration and balance. *The Arts in Psychotherapy*, 30(5), 283-292.
- McNamee, C. M. (2004). Using both sides of the brain: Experiences that integrate art and talk therapy through scribble drawings. *Art Therapy: Journal of the American Art Therapy Association*, 21(3), 136-142.
- McNamee, C. M. (2006). Experiences with bilateral art: A retrospective study. *Art Therapy: Journal of the American Art Therapy Association*, 23(1), 7-13.
- Ogden, P., & Minton, K. (2000). Sensorimotor psychotherapy: One method for processing traumatic memory. *Traumatology*, 6(3), 1-20.
- Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the body:* A sensorimotor approach to psychotherapy. New York: W. W. Norton.
- Omaha, J. (2004). Psychotherapeutic interventions for emotion regulation: EMDR and bilateral stimulation for affect management. New York: W. W. Norton.
- Rausch, S., van der Kolk, B. A., Fisler, R., Orr, S. P., Alpert, N. M., Savage, C. R., Fischman, A. J., Jenike, M. A., & Pittman, R. K. (1996). A symptom provocation study of posttraumatic stress disorder using positron emission tomography and script driven imagery. Archives of General Psychiatry, 53, 380-387.
- Rothschild, B. (2000). *The body remembers.* New York: W. W. Norton.
- Rubin, J. A. (2001). Approaches to art therapy: Theory and technique (2nd ed.). Philadelphia: Brunner-Routledge.
- Scaer, R. (2001). The body bears the burden: Trauma, dissociation, and disease. Binghamton, NY: Haworth Medical Press.
- Scaer, R. (2005). The trauma spectrum: Hidden wounds and human resiliency. New York: W. W. Norton.
- Schore, A. (2003). Early relational trauma, disorganized attachment, and the development of a predisposition to violence. In M. Solomon & D. Siegel (Eds.), *Healing trauma: Attachment, mind, body, and brain* (pp. 107-168). New York: W. W. Norton.
- Shapiro, F. (2001). Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures (2nd ed.). New York: Guilford Press.
- Shapiro, F. (Ed.). (2002). EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism. Washington, DC: American Psychological Association.

- Shapiro, F., & Forrest, M. (2004). EMDR: The breakthrough "eye movement" therapy for overcoming anxiety, stress, and trauma. New York: Basic Books.
- Shapiro, F., & Maxfield, L. (2003). EMDR and information processing in psychotherapy treatment: Personal development and global implications. In M. Solomon and D. Siegel (Eds.), Healing trauma: Attachment, mind, body, and brain (pp. 196-219). New York: W. W. Norton.
- Siegel, D. (2003). An interpersonal neurobiology of psychotherapy: The developing mind and the resolution of trauma. In M. Solomon & D. Siegel (Eds.), *Healing trauma: Attachment,* mind, body, and brain (pp. 1-56). New York: W. W. Norton.
- Steele, W. (2003). Using drawing in short-term trauma resolution. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 139-151). New York: Guilford Press.
- Talwar, S. (2007). Accessing traumatic memory through art making: An art therapy trauma protocol (ATTP). *The Arts in Psychotherapy, 34*, 22-35.
- Ulman, E., & Levy, B. (1968). An experiential approach to the judgment of psychopathology from painting. *American Journal of Art Therapy, 8, 3-12.*
- van der Kolk, B. A. (1994). The body keeps the score: Memory and the evolving psychobiology of post traumatic stress. *Harvard Review of Psychiatry*, 1(5), 253-265.

- van der Kolk, B. A. (2002a). The assessment and treatment of complex PTSD. In R. Yehuda (Ed.), *Treating trauma survivors with PTSD* (pp. 127-157). Arlington, VA: American Psychiatric Press.
- van der Kolk, B. A. (2002b). Beyond the talking cure: Somatic experience and subcortical imprints in the treatment of trauma. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 57-83). Washington, DC: American Psychological Association.
- van der Kolk, B. A. (2003). Post traumatic stress disorder and the nature of trauma. In M. Solomon & D. Siegel (Eds.), *Healing trauma: Attachment, mind, body, and brain* (pp.168-196). New York: W. W. Norton.
- van der Kolk, B. A. (2006). Clinical implications of neuroscience research in PTSD. *Annals of the New York Academy of Sciences*, 1071, 277-293.
- van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389-399.

### Call for Cover Art

Art Therapy is always looking for high quality artwork to grace the cover. Selection criteria are: Original, professionally crafted and presented artwork in all media, photographed in the vertical format, and having a high impact design that reads well in print, web and library environments. Should be sensitive to the visual-cultural standards of our international audiences. We especially invite non-traditional and new genre art—think of submitting a still image from a video, graphic novel, or artist book, art installation, or other image that pushes the boundaries of art in art therapy. Preference is given to AATA members. Cover artwork is juried and final selections are made at the discretion of the Editor. Please see the *Guidelines for Submission* in this issue for details on how to submit cover art.